

REVISION OF THE AUSTRALIAN CURCULIONIDÆ
 BELONGING TO THE SUBFAMILY
 CRYPTORHYNCHIDES.

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PART IV.

This instalment deals with *Psepholax* and allied genera, forming a group not only remarkable on account of the form and sculpture of its members, but on account of their peculiar distribution. *Psepholax* resembles many of the *Scolytidae* (e.g., *Hylesinus*, *Hylastes*) not only in shape, but in structure of limbs, parts of under surface, &c. In all, the tibiæ (especially the intermediate pair) are very remarkable. Great diversity exists in the mesosternal receptacle. In *Oreda* and *Zeneudes* the walls of the pectoral canal terminate in front in teeth-like processes. *Zeneudes* is the only genus of the subfamily as yet described in which the scape terminates considerably before the eye; in several other genera (e.g., *Neozeneudes*, *Oreda*) the scape when drawn out at right angles to the rostrum does not appear as if it would extend back to the eye, but when at rest it can be seen to touch its lower extremity. *Hybomorphus*, the only apterous member of the group, is perhaps the most remarkable genus of all the Australian weevils.

Pectoral canal not acutely margined.

Rostrum very short. PSEPHOLAX.

Rostrum long. HYBOMORPHUS.

Pectoral canal acutely margined.

Scape not attaining the eye ZENEUDES.

Scape attaining the eye.

Mesosternal receptacle open.

Receptacle with oblique sides.

Eyes finely faceted.

Intermediate tibiæ bidentate externally....	NEOZENEUDES.
Intermediate tibiæ (except at apex) normal	THEREBUS.
Eyes coarsely faceted.....	PSEUDOTHEREBUS.
Receptacle with parallel sides.....	THEREBIOSOMA.
Mesosternal receptacle cavernous.	
Walls of pectoral canal dentate in front.....	OREDA.
Walls simple.	
Pectoral canal terminated between four anterior coxæ.....	PSEPHOLACIPUS.
Pectoral canal terminated almost at metasternum	DERBYIA.

Genus PSEPHOLAX, White.

Voy. Ereb. & Terr., Ins. p. 15; Lacordaire, Gen. Col. vii. p. 72; Pascoe, Journ. Linn. Soc. Zool. xi. 1872, p. 481; Broun, Man. N.Z. Col. p. 478.

Pteroplectus, Schönherr, Mant. Sec. p. 50 (sp. inedit.).

Head large, not at all concealed by prothorax; forehead flat. *Eyes* ovate, finely faceted, distant. *Rostrum* short, wide. *Mandibles* large, stout, feebly dentate internally. *Antennæ* moderately stout; scape inserted nearer apex than base of rostrum, the length of funicle; two basal joints of funicle slightly longer than wide, the others transverse; club ovate, the length of four or five preceding joints. *Prothorax* convex, narrowed in front, apex scarcely produced and slightly emarginate in middle; sides rounded, strongly in front of middle, feebly to base; ocular lobes obtuse. *Scutellum* moderately large. *Elytra* convex, subcordate, closely applied to and slightly or not all wider than prothorax, sides decreasing with a more or less rounded outline to apex. *Pectoral canal* wide, shallow, walls rounded in front and not at all precipitous or ridge-like, emargination widely transverse. *Mesosternal receptacle* not excavated, either flat or slightly convex, slightly rounded behind. *Metasternum* large, slightly shorter than basal segment of abdomen; episterna very large. *Abdomen* large, sutures distinct, segments of variable size. *Femora* variable; posterior coxæ strongly transverse, almost touching elytra; tibiæ compressed, curved, in addition to the terminal hook with a small

subapical tooth, the intermediate* strongly bidentate externally, the posterior feebly dentate at external apex; tarsi long and thin, 3rd joint moderately wide, deeply bilobed, feebly spongiose beneath, claw-joint elongate; claws widely separated. Elliptic or elliptic-ovate, convex, squamose, winged.

An extraordinary genus abundantly represented in New Zealand. One species has been described from Norfolk Island and three from Eastern Australia, and two are here added. It is probable that others have yet to be discovered in the forests of New South Wales and Queensland, as all the specimens I have myself taken have been chopped out from solid and freshly felled timber.

Rostrum and head between eyes densely setose.

Elytra fasciate beyond middle..... *eigerus*, Pasc.

Elytra non-fasciate..... *Mastersi*, Pasc.

Rostrum not densely setose.

Rostrum wider than long..... *latirostris*, Pasc.

Rostrum longer than wide.

Elytra with large claw-like tubercles in middle.... *leoninus*, n.sp.

Elytra without large tubercles..... *humeralis*, n.sp.

PSEPHOLAX MASTERSI, Pasc.: Mast. Cat. Sp. No. 5409.

Dark reddish-brown; upper surface subopaque, under surface shining. Sparsely clothed with small ochreous scales. Head between eyes with a tuft of golden-brown erect setæ continued in rostral grooves almost to antennæ. Under surface with whitish elongate scales, longer on anterior coxæ and metasternum than elsewhere.

Head rather strongly punctate on flattened part. *Rostrum* slightly longer than head, sides parallel, polished and very finely punctate, sides grooved. *Prothorax* transverse, base feebly bisinuate; rather densely punctate, punctures small and shallow, basal third granulate-punctate. *Elytra* more than twice the length of prothorax; striate-punctate, striæ feeble, punctures close

* Except in *latirostris*.

together at sides, more distant towards suture; interstices feebly convex, wider along middle than at sides or suture, finely punctate, seriate-granulate, granules small and irregular at base, becoming larger and more acute towards and terminating before apex. *Under surface*, except apical segment of abdomen, sparsely punctate. Mesosternal receptacle flat. *Femora* moderately stout, not grooved, feebly dentate, teeth of the anterior very feeble; posterior extending to apex of elytra. Length $8\frac{1}{2}$, rostrum $1\frac{1}{2}$; width 4 mm.

Hab.—Q.: “Wide Bay” (Pascoe)—N.S.W.: Richmond River (Lea).

PSEPHOLAX LEONINUS, n.sp.

♂. Dark reddish-brown; subopaque above, shining below. Clothed with ochreous scales sparsely distributed and small on head, rostrum and prothorax rather denser and suberect on elytra. Under surface with elongate and almost white subsetose scales. Ciliation of ocular lobes long and golden-yellow.

Head finely punctate on vertex, densely between eyes and on rostrum to antennæ, punctures separated by narrow transverse short ridges. Rostrum slightly longer than head, slightly wider near apex than at base; scrobes shallow and open near eyes, rather deep in front. *Prothorax* transverse, base bisinuate; densely punctate, punctures rather small, shallow and round, towards base separated by feeble transverse ridges. *Elytra* scarcely twice the length of prothorax; seriate-punctate, punctures small, at sides in feeble striae, on disc more or less interrupted; each elytron with four distinct shining claw-like tubercles, one on the 5th interstice about the middle, and three on the 3rd, of which the one nearest the base is separated from the others by a distinct transverse impression which is continuous from suture to 7th interstice; towards base with numerous small transverse ridges from sides; about middle to near apex with numerous small acute tubercles, all of which are directed backwards. *Pectoral canal* feebly transversely wrinkled. Mesosternal receptacle feebly convex, and, with the rest of the under surface, sparsely punctate; the apical segment, however, moderately densely punctate.

Femora stout, not grooved or dentate, the anterior about twice as long as wide; the posterior about thrice, somewhat compressed and passing apex of elytra. Length $7\frac{1}{3}$, rostrum $1\frac{1}{5}$; width $3\frac{1}{2}$ mm.

Hab.—N.S.W. (Herr J. Faust), Richmond River (Lea)—Q. : Wide Bay (Sydney Museum).

Differs from all previously described species, except the New Zealand *Helmsi*, by the large claw-like tubercles of the elytra; these, however, are not constant as regards their number, as on one specimen there are four on the right elytron and three on the left, and on another three on the right and four on the left; on another there are but three on each.

PSEPHOLAX LATIROSTRIS, Pasc.; *l.c.* No. 5410.

Dark reddish-brown; upper surface subopaque, under shining. Moderately clothed with dingy yellowish scales, denser on abdomen than elsewhere.

Cylindrical. *Head* with dense round punctures; ocular fovea small. Rostrum very short and wide, being slightly wider than long; the sides feebly decreasing to apex; punctures as on head, but rather denser. Scape less than half the length of funicle and club combined. *Prothorax* feebly transverse, apex not much narrower than base; with somewhat round and rather dense punctures, at sides and base separated by short ridges; with a feebly elevated shining median carina. *Elytra* almost thrice the length of prothorax; striate; interstices regular, gently convex, with numerous small shining granules placed more or less transversely. *Under surface* (except at sides) rather indistinctly punctate. *Femora* moderately stout, indistinctly grooved and feebly dentate; intermediate tibiæ not wider than posterior and not externally bidentate. Length $9\frac{1}{2}$, rostrum $1\frac{1}{2}$; width 3 mm.

Hab.—N.S.W. : "Illawarra" (Pascoe), Manning River—Lord Howe Island (Macleay Museum).

The rostrum and intermediate tibiæ are at variance with the other species of the genus, but these are scarcely sufficient to warrant a genus being erected to receive the species.

PSEPHOLAX EGEREUS, Pasc.; *l.c.* No. 5408.

Piceous-brown, upper surface opaque, under shining. Moderately clothed with dingy yellowish (in places setose) scales; a distinct fascia of sooty scales on the elytra just beyond middle. Under surface and legs with long thin yellowish setæ. Between eyes and on base of rostrum densely clothed with long erect yellowish setæ.

Elliptic, subcylindrical. *Head* flattened and with round and rather dense punctures on vertex. Rostrum about once and one-third as long as wide; apical half highly polished and impunctate, basal portion concealed. Scape inserted nearer apex than base, almost the length of funicle. *Prothorax* moderately transverse, apex rather suddenly constricted; densely punctate, punctures (except in middle) separated by small ridges. *Elytra* about twice the length of prothorax, subcordate; punctate-striate, punctures (except towards apex) almost concealed; interstices gently convex, almost regular, with minute granules becoming larger on sides towards apex, and numerous at base on each side of scutellum; 5th interstice dilated in middle. *Under surface* indistinctly punctate except at sides and the apical segment. *Femora* moderately grooved, edentate. Length $7\frac{3}{4}$, rostrum $1\frac{1}{2}$; width 4 mm.

Hab.—"Queensland" (Pascoe), Wide Bay—N.S.W.: Clarence River (Macleay Museum).

PSEPHOLAX HUMERALIS, n.sp.

Piceous; upper surface opaque, under shining. Irregularly clothed with dingy yellowish scales; each side of elytra at base with a distinct patch of long yellowish setæ. Under surface and legs with long thin setæ.

Somewhat elliptic-ovate. *Head* flattened; basal portion finely punctate, elsewhere coarsely punctate and with short transverse curved ridges which are continued to apical third of rostrum but gradually becoming feebler. Rostrum twice as long as wide; apical portion of scrobes visible from above. *Prothorax* as in the preceding

species, but the ridges separating the punctures much more pronounced. *Elytra* about twice the length of prothorax; very irregular about middle where the 3rd and 5th interstices (although raised above their fellows) scarcely attain the general level; sides and base with numerous small granules, less numerous but rather larger towards apex, and entirely absent in middle. *Femora* feebly grooved and edentate, posterior strongly compressed. Length $6\frac{1}{2}$, rostrum $1\frac{1}{2}$; width $3\frac{1}{2}$ mm.

Hab.—Q. : Wide Bay (Macleay and Sydney Museums).

Closer to *P. leoninus* than to any other species here described.

PSEPHOLAX PASCOEI, Oll.; P. L. S. N. S. W. 1887, p. 1008. *Hab.*—Norfolk Island.

I have not a specimen of this species under examination, but when looking at the type some time ago I noticed that it was allied to *latirostris*, but differed in the alternate interstices of the elytra.

Genus HYBOMORPHUS, Saunders and Jekel.

Ann. Soc. Ent. Fr. 1855, p. 301; Lacordaire, Gen. Col. vii. p. 141.

Head small, almost concealed by prothorax; ocular fovea small, deep. *Eyes* small, subovate, not very finely faceted, distant. *Rostrum* long, thin, slightly curved, sides very feebly incurved to middle. *Antennæ* slender; scape inserted nearer apex than base of rostrum and passing apex, almost the length of funicle and club combined; two basal joints of funicle elongate; club small, oblong-ovate. *Prothorax* convex, transverse, sides and base rounded, ocular lobes obsolete; junction of pronotum and prosternum ridge-like. *Scutellum* absent. *Elytra* scarcely longer than wide, base widely and semicircularly emarginate and slightly wider than prothorax, rounded from near base to apex, each side with a distinct epipleural fold. *Pectoral canal* wide in front, narrow and deep between anterior coxæ and terminated between the intermediate, walls rounded in front of anterior coxæ, and not at all precipitous or keeled. *Mesosternal receptacle* slightly transverse, sides slightly raised above metasternum, middle open and

excavated. *Metasternum* about half the length of 1st abdominal segment, very narrow between four posterior coxæ; episterna very narrow in middle. *Abdomen* moderately large, sutures distinct; two basal segments large, 1st slightly longer than 2nd, intercoxal process wide, almost truncate, apex raised in middle, three apical segments small, apical slightly shorter than 2nd and noticeably longer than the intermediates combined. *Legs* rather short and thick; femora feebly grooved and obsoletey dentate, posterior terminated just before apex of abdomen; posterior coxæ transverse, almost touching elytra; tibiæ rounded, straight beneath, somewhat sinuous above and thickened at apex, terminal hook short and stout, each with a small subapical tooth on each side of which is a tuft of elongate setæ; tarsi rather slender, 3rd joint short, not much wider than 2nd, deeply bilobed, claw-joint moderately elongate; claws feeble. Briefly elliptic, convex, apterous.

A remarkable genus, the true position of which I believe to be close to *Psepholar*. M. Lacordaire places each in a separate "groupe," the latter in the *Ithyporides*, the former in the *Cryptorhynchides crais*. I have not seen the original description.

HYBOMORPHIUS MELANOSOMUS, S. & J., *l.c.* p. 302.

Black, softly shining; antennæ and tarsi dull reddish-brown. Prothorax with a very minute and indistinct scale in each puncture, sides and base margined with ochreous scales. Elytra with small scattered ochreous scales on apical half and condensed on sides about apex and on the 4th interstice beyond the middle. Each puncture of under surface with a small scale. Tibiæ and apex of femora with ochreous scales

Head with small shallow punctures. Rostrum thin, subparallel, shorter than prothorax and more than twice the length of head; punctures somewhat similar to those on head but less rounded, and here and there interrupted by small impunctate spaces. Funicle with first joint the length of 2nd-4th, 2nd equal to 3rd-4th, 5th-7th slightly transverse. *Prothorax* transverse ($8 \times 10\frac{1}{2}$ mm.), with a very feeble impression in middle of base; with

small, round, shallow punctures, not very close together but remarkably regular. *Elytra* as wide as length of suture ($11\frac{1}{2}$ mm.) and but little shorter than greatest length ($12\frac{3}{4}$ mm.); with small feeble punctures and towards the sides feebly wrinkled; a moderately distinct subsutural stria, scarcely visibly striate elsewhere; 5th interstice feebly raised from near base almost to apex; epipleuræ feebly wrinkled at base, dilated and more oblique behind middle, from middle to near apex with two rows of moderately distinct punctures. *Under surface* with somewhat similar but larger punctures than those on prothorax, punctures larger on basal segment of abdomen and coxæ than elsewhere. Length $17\frac{1}{2}$, rostrum $5\frac{1}{2}$; width $11\frac{1}{2}$ mm.

Hab.—Lord Howe Island.

I am indebted to Mr. George Masters for the specimen described.

Since the specimen described above was examined, I have obtained a smaller specimen (15 mm.) from the Sydney Museum. It differs in having the elytral ridges less pronounced, the rostrum more coarsely punctate, and in having a deep and large pear- (or top-) shaped fovea on the under surface of the head immediately behind the rostrum. In the larger specimen this fovea is entirely absent, the convexity of that part of the head being uninterrupted.

Genus ZENEUDES, Pascoe.

Journ. Linn. Soc. Zool. xii. 1873, p. 35.

Head rather small, convex, not concealed; ocular fovea small, narrow. *Eyes* small, subreniform, finely faceted, distant. *Rostrum* rather long and stout, arched at base. *Antennæ* stout; scape short, scarcely half the length of funicle, inserted slightly nearer apex than base of rostrum, termination distant both from eye and apex of rostrum; funicle stout, 1st joint as long as wide, 2nd wider and larger than first, the others strongly transverse; club short, subconical. *Prothorax* subdepressed, apex produced and narrow, behind it subquadrate, base feebly bisinuate; ocular lobes almost rectangular. *Scutellum* small, subtriangular. *Elytra* no wider than and scarcely twice the length of prothorax,

sides parallel to near apex, apex feebly produced and rounded. *Pectoral canal* not very deep or wide, terminated nearer anterior than intermediate coxæ, in front acutely margined, each margin just behind the ocular lobe produced in a tooth-like process. *Mesosternal process* level with metasternum, flat except that it is slightly scooped out in front, the sides being produced forwards so as to touch the anterior coxæ. *Metasternum* large, the length of basal segment of abdomen; episterna large. *Abdomen* large, sutures distinct; basal segment longer than 2nd, apex incurved to middle, intercoxal process rather narrow and rounded; intermediates slightly sloping from apex to base, their combined length equal to that of 2nd and slightly more than that of apical. *Legs* moderately long and thin; femora edentate, narrowly and very feebly grooved for half their length, posterior terminated before apex of abdomen; posterior coxæ transverse, almost touching elytra; tibiæ thin, compressed, grooved, bisinuate beneath, each in addition to the terminal hook with a small sub-apical tooth both above and below; tarsi moderately narrow, 3rd joint not much wider than long, deeply bilobed; claw-joint elongate; claws strongly curved. Cylindrical, squamose, punctate, winged.

Of the described Australian genera this is the only one in which the scape does not extend to the eye; and there is no scrobe behind, the rostrum in its position being flattened and shining back to the eye; in front, however, there is a groove so that the side appears somewhat as a boar's tusk. The dilated 2nd joint of the funicle reminds one somewhat of the antennæ in many of the *Pselaphidæ*. As Mr. Pascoe has remarked, it is allied to the New Zealand *Oreda*, which has the teeth-like projections of the margins of the pectoral canal more acute and longer than in *Z. sterculiæ*;—this character is a most remarkable one and it is singular that it should have been overlooked by Mr. Pascoe; does it denote an approach to such forms as *Chirozetes* and *Mecopus*? *Oreda* agrees in many unusual features with *Zenoides*, but is separated on account of the mesosternal receptacle being cavernous and the scape extending back to the eye.

ZENEDES STERCULIÆ, Pasc.; Mast. Cat. Sp. No. 5411.

-Dark piceous-brown. legs and antennæ somewhat paler; feebly shining, rostrum highly polished. Head sparsely squamose; rostrum glabrous except in lateral grooves; prothorax with ochreous scales about base and apex and a few on disc, elsewhere with small sooty scales; elytra more densely clothed, the scales larger and the ochreous rather more numerous than the sooty ones. Under surface with sparse ochreous or whitish scales, denser on mesosternal receptacle than elsewhere. Pectoral canal with fine silken pubescence, giving it a somewhat misty appearance

Head with rather small punctures. Rostrum almost the length of prothorax, feebly widening from base to apex; very finely punctate; grooved on each side, the grooves terminating before antennæ: a shallow groove on each side in front of antennæ. *Prothorax* as long as wide; punctures rather small, those at summit of lateral declivity bounded by small acute ridges; a shining rounded carina very indistinct near base and apex, but distinct along middle. *Elytra* seriate-punctate, punctures large, oblong, each decreasing in depth to base and apex and more or less replete with scales; interstices raised, the width of or narrower than punctures. *Metasternum* with rather large shallow punctures on flanks; episterna each with a single row of punctures but becoming confused at apex. Abdomen with rather sparse punctures except on apical segment, the basal with a semicircular row of very large punctures. Length $10\frac{1}{2}$, rostrum 3; width $4\frac{1}{2}$ mm.

Hab.—Gayndah (on "bottle-trees," *Sterculia rupestris*; Mr. George Masters).

I have recently obtained a specimen from the Sydney Museum which differs from the one above described in being smaller (8 mm.), rostrum shorter and termination of scape less distant from eye; it is perhaps a female.

NEOZENEDES, n.g.

Head moderately large, convex, not concealed; ocular fovea small. *Eyes* ovate, distant, finely faceted. *Rostrum* the length of

prothorax, moderately stout in ♂, thinner in ♀, slightly curved; scrobes shallow; base on each side with a shallow groove. *Antennæ* stout, scape inserted almost in exact middle of rostrum, shorter than funicle, apparently (only) not extending back to eye; 1st joint of funicle obtriangular, 2nd compressed, longer and wider than 1st, the others widely transverse; club subconical. *Prothorax* feebly transverse, slightly convex, apex produced and narrow, sides towards apex strongly towards base feebly rounded, base bisinuate; ocular lobes rectangular. *Scutellum* moderately large, somewhat round. *Pectoral canal* deep and wide, terminated between intermediate coxæ. *Mesosternal receptacle* not raised, scooped out in front, sides decreasing to base; open. *Metasternum* large, slightly shorter than basal segment of abdomen; episterna large. *Abdomen* moderately large, 1st segment as long as 2nd and 3rd combined; intercoxal process somewhat triangular; 3rd and 4th combined slightly longer than 2nd or 5th. *Legs* moderately long; femora stout, the anterior shorter and stouter than the others, anterior feebly dentate, the four posterior grooved and strongly dentate, posterior terminated before apex of abdomen; posterior coxæ transverse, bounded at sides by metasternal episterna; tibiæ compressed, grooved, bisinuate beneath, each in addition to terminal hook with a small subapical tooth both above and below; the intermediate strongly ridged above, the ridge excavated in middle and causing the tibiæ to appear bidentate as in *Psepholax*. Subcylindrical, squamose, punctate, winged.

This genus is clearly intermediate in position between *Zeneudes* and *Oreda*, differing from the former in the scape extending back to the eye, and from the latter by the open mesosternal receptacle.

NEOZENEUDES DIVES, n.sp.

♂. Reddish-brown or black, feebly shining, apical half (or two-thirds) of rostrum highly polished. Densely clothed with soft scales varying in colour from pale yellow (or even white) to dark brown or black; head and basal half of rostrum with pale ochreous and reddish-brown scales; prothorax more densely

clothed than elsewhere—scales on each side at base and apex paler, sometimes silvery white; on disc the dark brown scales more or less condensed into spots; on one specimen the dark scales almost black and forming the letter O with a median spot; the yellow scales have frequently a golden lustre; scales of elytra variable in colour and pattern, but usually forming a moderately distinct small pale spot on each side about middle and another and more feeble one on each side of apex. Under surface with paler scales than above and denser on two basal segments of abdomen and flanks of metasternum than elsewhere. Legs moderately densely clothed.

Head densely and rather strongly punctate. Rostrum slightly dilated and grooved on each side between base and antennæ; between grooves strongly and subseriately punctate, sides towards apex with rows of small punctures. *Prothorax* with small and shallow punctures; those in middle of summit of lateral declivity bounded by feeble ridges: a feeble shining median carina not continuous to base or apex, and more or less concealed. *Elytra* striate-punctate, punctures moderately large, long and narrow; interstices gently convex, much wider than punctures. *Metasternum* rather sparsely punctate in middle, base with a semicircular row of large punctures, a similar row on basal segment of abdomen, apical segment densely and strongly punctate, elsewhere with sparse and moderately large punctures. *Femora* stout, the anterior very feebly, the four posterior strongly dentate. Length $8\frac{3}{4}$, rostrum $2\frac{1}{3}$; width $3\frac{3}{4}$; variation in length $5\frac{1}{2}$ - $8\frac{3}{4}$ mm.

♀. Differs in having the rostrum thinner, not dilated between base and much less coarsely punctate; the antennæ also are noticeably thinner. -

Hab.—New South Wales (Herr J. Faust), Illawarra (Macleay Museum).

The scales are sometimes very beautiful, having frequently a golden, silvery or purplish lustre.

Genus *THEREBUS*, Pascoe.

Journ. Linn. Soc. Zool. xi. 1872, p. 480.

Head not concealed; ocular fovea shallow and indistinct. *Eyes* subreniform, finely faceted, distant. *Rostrum* the length of prothorax, comparatively slender, feebly curved; mandibles prominent and rather acute. *Antennæ* moderately stout; scape shorter than funicle, inserted at exact middle of rostrum; 1st joint of funicle elongate, the others short, 7th strongly transverse; club moderately large, ovate. *Prothorax* convex, transverse, apex narrow, feebly produced, sides strongly rounded behind apex but straight on basal half, base truncate; ocular lobes almost rectangular. *Scutellum* moderately large and subtriangular. *Elytra* subcylindrical, wider than and about thrice the length of prothorax; base feebly bisinuate, sides parallel to near apex, apex rounded. *Pectoral canal* not very deep or wide, terminated in front of intermediate coxæ. *Mesosternal receptacle* depressed between intermediate coxæ, raised in front, and at apex vertically truncate. *Metasternum* large, shorter than 1st abdominal segment; episterna large. *Abdomen* large, basal segment about once and one-third the length of 2nd, straight at apex, intercoxal process rounded; intermediates large, their combined length equal to that of 2nd and more than that of 5th. *Legs* moderately long; femora moderately stout, not grooved or dentate, posterior terminated considerably before apex of abdomen; posterior coxæ transverse, at sides bounded by metasternal episterna; tibiæ slightly compressed, not bisinuate beneath, widened at apex, in addition to terminal hook each with a small subapical tooth both above and below; tarsi moderately wide, 3rd joint wide, deeply bilobed, claw-joint elongate, setose. Subelliptic, convex, squamose, punctate, winged.

This genus appears to be allied to *Psepholax*, but I do not think that the imagines of the only known species are borers.

THEREBUS CEPUROIDES, Pasc., *l.c.* p. 480, Plate XII. fig. 13.

Brownish-red; prothorax darker than elytra, head and rostrum darker than prothorax; antennæ dull red. Moderately densely

clothed with scales, having a rather dingy appearance to the naked eye but under a lens having a soft golden gloss; whitish scales on flanks of prothorax and scattered about in small patches on the elytra. Under surface with moderately elongate and elongate scales, denser on abdomen than elsewhere except on mesosternal receptacle where they are all elongate, and obscure its form. Pectoral canal with moderately stout elongate scales in front.

Head and rostrum densely and strongly punctate, punctures rather smaller and deeper towards apex of rostrum than elsewhere. Head feebly impressed between eyes. Rostrum parallel-sided, grooved on each side between base and antennæ. *Prothorax* with rather large, perfectly round and shallow punctures, larger in middle and towards base than elsewhere; from apex to beyond middle with a feeble shining carina. *Scutellum* punctate. *Elytra* about once and one-fourth the width of prothorax; striate-punctate, punctures large, suboblong; interstices feebly rounded, considerably wider than punctures, densely and rather strongly punctate. *Under surface* moderately densely punctate, punctures small and round but not regular in size, apical segment densely punctate. Length 7, rostrum 2; width $3\frac{1}{2}$ mm.

Hab.—"Western Australia" (Pascoe), Geraldton (Lea).

The prothoracic punctures are peculiar, for, though shallow, they are very acutely bordered.

PSEUDOTHEREBUS, n.g.

Head rather small, moderately convex; ocular fovea indistinct. *Eyes* ovate, coarsely faceted, distant. *Rostrum* thin, moderately long, almost straight. *Antennæ* moderately stout; scape inserted almost in exact middle of rostrum, curved and dilated at apex, slightly shorter than funicle; 2nd joint of funicle slightly longer than 1st, 3rd-7th transverse; club briefly ovate. *Prothorax* feebly transverse, rather flat, sides rounded, apex feebly produced and more than half the width of base but rather suddenly narrowed, base bisinuate; ocular lobes obtusely rounded. *Scutellum* small

and round. *Elytra* cylindrical, slightly but noticeably wider at base than prothorax, shoulders slightly rounded. *Pectoral canal* rather narrow and shallow, its termination not very evident, but if considered at receptacle then at base of anterior coxæ. *Mesosternal receptacle* not raised, triangular, widely and feebly emarginate in front, scarcely visibly concave; open. *Metasternum* slightly longer than basal segment of abdomen; episterna rather large. *Abdomen* large, 2nd segment almost as long as 1st, as long as 3rd and 4th combined, and noticeably longer than 5th. *Legs* moderately long and rather thin; posterior coxæ not extending to sides; femora not grooved, all distinctly dentate, posterior terminating about apical segment; tibiæ compressed, bisinuate beneath, in addition to the (rather strong) terminal hook with a small subapical tooth both above and below; tarsi moderately narrow. Subcylindrical, squamose, punctate, winged.

Allied to *Therebus*, but differs in the facets of eyes, dentition of femora, and to a certain extent in shape of mesosternal receptacle.

PSEUDOTHEREBUS SCULPTIPENNIS, n.sp.

Piceous, antennæ and tarsi feebly diluted with red. Not very densely clothed with dull ochreous mingled in places with sooty-brown scales. Under surface with sparser scales (moderately dense, however, on anterior coxæ and sides of apical segments) of a more uniform colour.

Head densely and coarsely punctate, punctures partially concealed. *Rostrum* densely punctate on basal fifth, elsewhere highly polished and with fine punctures subseriate in arrangement, a very indistinct groove on each side at base. *Prothorax* with perfectly round, large, shallow, sharply defined punctures and with a raised shining carina continuous from base to apex. *Elytra* striate-punctate; punctures oblong, deep, each separated by a thin transverse ridge except at sides; interstices scarcely convex, slightly rugose, wider than striæ and with small shining granules scarcely visible except where scales have been abraded.

Under surface irregularly and in places rather densely punctate; metasternal episterna each with a single row of punctures. Length $8\frac{2}{3}$, rostrum $1\frac{3}{4}$; width $3\frac{1}{2}$; variation in length $7\frac{1}{2}$ - $8\frac{2}{3}$ mm.

Hab.—Q.: Mount Dryander (Mr. A. Simson, No. 2229).

With a good lens and in suitable lights the whole of the under surface may be seen to be densely covered with very minute punctures.

THEREBIOSOMA, n.g.

Eyes finely faceted. *Rostrum* feebly curved. Two basal joints of *funicle* equal in size; club normally ovate. *Prothorax* decidedly transverse. *Pectoral canal* rather narrow and deep, terminated almost at metasternum. *Mesosternal receptacle* quadrate, sides very narrow; open. *Femora* edentate. Other characters as in the preceding genus.

Allied to the preceding genus and to *Therebus*, from both of which it may be readily distinguished by the shape of the mesosternal receptacle.

THEREBIOSOMA RHINARIOIDES, n.sp.

Dull reddish-brown, rostrum darker; antennæ and tarsi reddish. Moderately densely clothed with dingy ochreous scales, the elytra with a feebly maculate appearance owing to spots of sooty scales. Under surface and legs more regularly clothed with paler scales. Head and basal third of rostrum squamose.

Head densely but indistinctly punctate. *Rostrum* densely punctate on basal third, elsewhere shining and with small but deep and distinct punctures; from base to near antennæ a feeble groove; on each side from just behind antennæ to apex a shining impunctate median space. *Prothorax* with dense, round, clearly cut punctures, which, however, are partially obscured by scales; a small shining carina continuous from base to apex, close to which the punctures are smaller and slightly compressed. *Elytra* striate-punctate; punctures deep, oblong, and each containing a scale; interstices much wider than striæ and densely punctate.

Under surface (including metasternal episterna) and legs densely punctate; 3rd and 4th abdominal segments slightly produced at sides. Length $7\frac{1}{2}$, rostrum 2 (vix); width $3\frac{1}{2}$ mm.

Hab.—N.S. Wales (Mr. George Masters).

This species bears a remarkable resemblance to *Rhinaria tibialis*, Blackb.

Genus O R E D A, White.

Voy. Ereb. & Terr. Ins. p. 16; Lacord. Gen. Col. vii. p. 113; Broun, Man. N.Z. Col. p. 486.

Head moderately large, partially concealed, moderately convex; ocular fovea feeble. *Eyes* ovate, finely faceted, distant. *Rostrum* shorter than prothorax, feebly curved, wide or moderately wide; scrobes open towards base. *Antennæ* rather short and stout; scape inserted nearer apex than base of rostrum, slightly shorter than funicle; 1st joint of the latter moderately long, 3rd-7th strongly transverse; club ovate, free. *Prothorax* moderately convex, subtriangular, apex largely but scarcely suddenly narrowed, base bisinuate; ocular lobes almost rectangular. *Scutellum* small, subtriangular. *Elytra* convex, subcylindrical, shoulders feebly rounded. *Pectoral canal* moderately wide and deep, terminated just before base of anterior coxæ, walls in front produced into a dentate or spiniform process. *Mesosternal receptacle* feebly raised, rugosely punctate, sides dilated in middle, apex widely and feebly emarginate; cavernous. *Metasternum* slightly longer than basal segment of abdomen; episterna rather large. *Abdomen* moderately large; 1st segment slightly shorter than 2nd and 3rd combined, its apex incurved and base rounded; 3rd and 4th combined longer than 2nd or 5th. *Legs* moderately short and strong; posterior coxæ almost touching sides; femora shallowly and very feebly grooved and edentate, posterior almost reaching apex of abdomen; tibiæ feebly compressed, in addition to the strong terminal hook with a small subapical tooth below and a moderately strong one above, intermediate ridged above, the ridge largely excavated in middle and causing the tibiæ to appear

bidentate; tarsi shorter than tibiæ, 3rd joint wide, deeply bilobed, claw-joint long and thin, claws small and thin. Elliptic, squamose, winged.

This genus, of which Captain Thos. Broun records four species for New Zealand, is now first recorded for Australia.

On the species described below there is a small node on each of the anterior femora, but these could scarcely be called dentate.

OREDA DUBIA, n.sp.

Dark piceous-brown (almost black); antennæ and tarsi paler. Rather densely clothed with sooty-brown scales; with clear ochreous-yellow scales forming a distinct spot on each side of base and apex of prothorax, a patch at base of elytra, an irregular fascia at and a still more irregular one below summit of posterior declivity, with small spots towards the base. Under surface less densely clothed than upper, the ochreous scales clothing meso-sternal receptacle, sides of abdomen and part of posterior femora.

Head with dense punctures continued on to basal half of rostrum; flat between eyes. Rostrum distinctly shorter than prothorax, sides incurved to middle; apical half less densely punctate than basal half, but punctures of moderate size and well defined. *Prothorax* with dense round punctures almost concealed by clothing. *Elytra* striate-punctate, both striæ and punctures almost concealed. *Under surface* irregularly punctate, punctures of basal segment of abdomen and flank of metasternum rather large and round. *Legs* densely punctate. Length $8\frac{1}{3}$, rostrum 2 (vix); width $3\frac{1}{2}$ mm.

Hab.—N.S. Wales (type in Macleay Museum).

I have described the specimen under examination as new, although it is possible that it may be the New Zealand *O. notata*, White. Not being at liberty to dissect the specimen I cannot be sure of its sex; if ♂ (as I believe it to be) it will undoubtedly represent a distinct species; but if ♀ this may not be the case. Compared with an undoubted male specimen of *O. notata* from New Zealand (for which I am indebted to Mr. R. Helms) the

specimen above described differs in having the prothorax less transverse, the teeth of the pectoral canal much shorter and terminating considerably behind the ocular lobes (in the N.Z. specimen they are somewhat curved and terminate level with the lobes); the ocular vibrissæ are shorter, denser and more decidedly golden; the eyes are very distinctly more prominent; the rostrum is narrower with a more regular outline, and the punctures at the base are denser and less clearly defined; from the sides it is seen to be narrow and very gently curved throughout, whilst in the other specimen it is stouter and very decidedly elevated immediately in front of the ocular fovea.

Genus PSEPHOLACIPUS, n.g.

Head not concealed; ocular fovea indistinct. *Eyes* large, subreniform, coarsely faceted, not separated the width of rostrum. *Rostrum* slightly shorter than prothorax, wide, curved, dilated and truncate at apex; mandibles almost concealed. *Antennæ* moderately slender; scape inserted nearer apex than base of rostrum and passing apex; 1st joint of funicle moderately elongate; club ovate, subadnate to funicle. *Prothorax* transverse, convex, sides rounded, apex much narrower than base but not suddenly lessened, base subtruncate; ocular lobes obtuse. *Scutellum* oblong-elliptic. *Elytra* elongate-subcordate, wider than prothorax, shoulders and apex rounded. *Pectoral canal* wide and moderately deep, terminated between four anterior coxæ. *Mesosternal receptacle* depressed between intermediate coxæ, raised in front, the sides rather narrow; emargination widely transverse; cavernous. *Metasternum* large, the length of 1st abdominal segment; episterna large, truncate posteriorly. Basal segment of *abdomen* considerably larger than 2nd, apex almost truncate, intercoxal process narrow and rather strongly rounded, intermediates rather large and flat, their combined length noticeably more than that of 2nd or apical. *Legs* not very long; femora comparatively stout, edentate, narrowly grooved, the groove usually concealed, posterior terminated before apex of abdomen; posterior coxæ feebly trans-

verse, bounded by metasternal episterna; tibiæ compressed, terminal hook, except of anterior, feeble, each with a very feeble subapical tooth; above ridged, the ridge largely excavated so that each of the tibiæ appears to be very strongly bidentate; tarsi rather slender; 3rd joint wide, deeply bilobed, claw-joint elongate; claws rather feeble. Subelliptic, convex, squamose, winged.

A peculiar genus, the tibiæ of which are entirely different to those of all other Australian genera except *Psepholax* and *Neozeneudes*; I am inclined therefore to place it in the vicinity of those genera. The mesosternal receptacle is cavernous, but it is also cavernous in *Oreda*, an undoubted ally of *Zeneudes*.

PSEPHOLACIPUS FOSSILIS, n.sp.

Dark reddish-brown; elytra obscurely variegated with red; claw-joints and antennæ dull red. Rather sparsely clothed with dingy ochreous scales, denser on tibiæ and under surface of femora than elsewhere, each puncture of prothorax containing a scale; round on disc, moderately elongate at sides; interstices of elytra with regular scales.

Head and rostrum coarsely punctate; latter feebly grooved on each side between base and antennæ. *Prothorax* subglobular; densely punctate, punctures large, round and moderately deep. *Elytra* striate-punctate, striæ rather wide, punctures rather shallow, each containing a scale; interstices convex, rounded, each appearing as a row of granules owing to numerous and regular transverse impressions. *Under surface* with large punctures irregularly distributed; metasternal episterna with a double row. Posterior *tibiæ* (including teeth) wider at apex than near base, intermediate wider near base, anterior slightly wider near base than at apex, its terminal hook directed inwards almost at a right angle. Length $7\frac{1}{3}$, rostrum $1\frac{1}{2}$; width $3\frac{1}{2}$ mm.

Hab.—N.Q.: Cooktown (Herr J. Faust, 5 specimens).

PSEPHOLACIPUS MINOR, n.sp. or var.

Differs from the preceding species in being smaller; scales rather larger, paler and more distinct; eyes more prominent; pro-

thoracic punctures larger, less rounded and more or less interrupted by feeble longitudinal ridges; elytral interstices much narrower, and though similarly transversely impressed the granules are very much longer than wide; the tibiæ have the large outer teeth much less prominent and the excavation shallower. Length $3\frac{3}{4}$, rostrum 1 (vix); width $1\frac{3}{4}$ mm.

Hab.—N.Q. : Cooktown (Herr J. Faust).

Perhaps a small variety of the preceding species. I have seen but one specimen.

DERBYIA, n.g.

Head rather small and convex, not concealed; ocular fovea large, suboblong and deep. *Eyes* large, subreniform, coarsely faceted, widely separated above, almost touching below. *Rostrum* long, moderately thin and curved. *Antennæ* stout; scape inserted nearer apex than base of rostrum, the length of funicle; 1st joint of the latter moderately long, 3rd-7th transverse; club elliptic-ovate. *Prothorax* transverse, convex, sides strongly rounded, apex narrow, less than half the width of base, base scarcely bisinuate; ocular lobes somewhat rounded. *Scutellum* moderately small, round. *Elytra* slightly wider than prothorax, subcylindrical, shoulders rounded. *Pectoral canal* rather narrow, deep, terminated between middle of intermediate coxæ. *Mesosternal receptacle* narrowly transverse, cavernous. *Metasternum* slightly shorter than basal segment of abdomen; episterna moderately large. *Abdomen* moderately large; 1st segment as long as 2nd and 3rd combined; 3rd and 4th combined slightly longer than 2nd and noticeably longer than 5th. *Legs* stout; femora edentate, indistinctly grooved, posterior not extending to apex of abdomen; tibiæ somewhat compressed, dilating to apex, all more or less serrate externally; anterior suddenly dilating outwards at apex, intermediate semicircularly emarginate at apex on outer portion, posterior more deeply emarginate, the emargination commencing at one-third from apex; claw-joint long and moderately stout. Convex, subcylindric, feebly clothed, winged.

The eyes, ocular fovea, mesosternal receptacle and tibiæ are the strongest features of this genus. The receptacle is very indistinctly separated from the metasternum so that on a first glance it (on account of its small size) appears to be absent; on probing with a pin it is seen to be cavernous, although unless very closely examined appearing to be very decidedly open. The species described below resembles a number of species belonging to *Tranes*. The ciliation of the ocular lobes is remarkably short.

DERBYIA LAMINATUS, n.sp.

Dark reddish-brown, shining. Sparsely clothed with yellowish setæ; on prothorax a seta in each puncture not (except at sides) rising to general level; on elytra forming a single series on each interstice. Under surface with paler and sparser setæ. Legs (especially the tibiæ) more densely setose; tibiæ fringed beneath.

Head with rather dense, round, shallow punctures. Rostrum moderately curved, slightly wider at apex than at base; feebly grooved above scrobes; basal two-thirds coarsely punctate and very feebly tricarinate; apical portion with sparse but distinct punctures. *Prothorax* with moderately large round and well defined but not deep or very dense punctures, punctures larger and more crowded at summit of flanks than elsewhere. *Elytra* striate, striæ moderately deep and almost impunctate, a few small punctures at sides; interstices convex, wider than striæ, with numerous transverse impressions. *Metasternum* with punctures similar to but rather less numerous than those on disc of prothorax. Two basal segments of abdomen each with two irregular rows of smaller punctures, 3rd and 4th segments each with a single row of still smaller ones; apical segment densely punctate. Length 8, rostrum $2\frac{1}{6}$; width 4 mm.

Hab.—N.W. Australia (type in Macleay Museum).

The elytral interstices have the appearance of being formed by successive slightly overlapping plates; the striæ (except at sides) are without distinct punctures.

Postscript.—By the unintentional misplacement of several lines, some confusion has been introduced into the tabulation of *Melanterius* given in Part ii. of this Volume, pp. 207-208. It should have appeared as follows (after line 4, p. 207):—

Femoral emargination normal.	
Scape inserted nearer base than apex of rostrum	<i>aberrans</i> , n.sp.
Scape inserted nearer apex than base.	
Elytra with irregular interstices.	<i>semiporcatus</i> , Er.
Elytra with regular interstices.	
Intermediate segments of abdomen each larger than 2nd.....	<i>ventralis</i> , n.sp.
Intermediate segments each equal to 2nd....	<i>aratus</i> , Pasc.
Intermediate segments combined about equal to 2nd.	
Interstices flattened or rounded on basal half of elytra.*	
Punctures sometimes concealed by clothing.....	<i>floribus</i> , Pasc.
Punctures not at all concealed.	
Interstices similar throughout.	
More than 3 mm. in length.....	<i>compactus</i> , n.sp.
Less than 3 mm.....	<i>castaneus</i> , n.sp.
Interstices triangularly raised posteriorly.	
Elytra on basal half scarcely striate, punctures clearly defined.	
Apical segment of abdomen with a few large punctures.....	<i>alipatus</i> , n.sp.
Apical segment densely punctate	<i>porosus</i> , n.sp.
Elytra striate, punctures not sharply defined.	
Prothorax clothed.	
Scape passing apex of rostrum	<i>impolitus</i> , n.sp.
Scape not passing apex.....	<i>tenuis</i> , n.sp.
Prothorax not at all or scarcely visibly clothed.	
Metasternum with a pad of white hairs on each side...	<i>pectoralis</i> , n.sp.
Metasternum normally clothed.	
Metasternal episterna with regular punctures.	

* This does not include the lateral interstices, which are sometimes triangularly raised: *tristis* is intermediate, only the suture and two interstices on each side of it being flattened on the basal half.

Elliptic.....	<i>interstitialis</i> , n.sp.
Ovate.....	<i>incomptus</i> , n.sp.
Metasternal episterna with regular punctures only in middle....	<i>tristis</i> , n.sp.
Interstices more or less carinate or trian- gularly raised on basal half.*	
Antennæ comparatively stout†... ..	<i>antennalis</i> , n.sp.
Antennæ slender.	
Separation of eyes less than width of rostrum at base.	
Derm reddish....	<i>cordipennis</i> , n.sp.
Derm black.	
Ridging of interstices continued to extreme base.....	<i>unidentatus</i> , n.sp.
Ridging interrupted before base.	
Less than 4 mm. in length.....	<i>vulgivagus</i> , n.sp.
More than 4 mm.....	<i>strabonis</i> , n.sp.
Separation of eyes equal to or more than width of rostrum at base.	
Shoulders not at all produced.....	<i>serrulus</i> , Pasc.
Shoulders feebly produced on to prothorax.	
Elytra maculate.	
Very decidedly so.....	<i>vinosus</i> , Pasc.
Feebly.....	<i>maculatus</i> , n.sp.
Elytra not at all maculate.	
Prothorax with median carina.	<i>solitus</i> , n.sp.
Prothorax without median carina.	
Scape of ♀ not passing apex of rostrum.....	<i>parvidens</i> , n.sp.
Scape of ♀ passing apex.	
Apical segment of abdo- men with a transverse impression	<i>cinnamomeus</i> , Pasc.
Apical segment with a circular impression....	<i>acacia</i> , n.sp.

* Not always including extreme base.

† This character is quite sufficient to distinguish this species amongst those with which I have placed it.